

**C-A DEPARTMENT MAINTENANCE, REPAIR AND MODIFICATION PROGRAM**  
**JOBS SCHEDULING REQUEST**

**GROUP: Accelerator Controls – B. Venegas (ext. 3917, BP 7241), Brian Oerter (ext. 2799)**

| <b><u>JOB#</u></b> | <b><u>AREA<br/>WHERE<br/>WORK IS<br/>TO BE<br/>DONE</u></b> | <b><u>POSSIBLE<br/>DISRUPTIONS<br/>TO<br/>OTHERS</u></b> | <b><u>TIME<br/>PERIOD</u></b> | <b><u>JOB DESCRIPTION, RESPONSIBLE<br/>PERSON &amp; GROUP DOING THE WORK</u></b> | <b><u>ADD'L.<br/>SUPPORT<br/>AND<br/>COMMENTS</u></b> | <b><u>HP<br/>SURVEY<br/>AND<br/>DETAILS</u></b> |
|--------------------|---|--|-------------------------------|--|---|---|
|--------------------|---|--|-------------------------------|--|---|---|

**AGS / BOOSTER**

|   |         |  |              |   |  |  |
|---|---------|--|--------------|---|--|--|
| 1 | Booster |  | 5/17 to 5/20 | Check power supply connectors in Eurocard controller chassis for Booster main magnet P.S. |  |  |
| 2 | Booster |  | 5/17         | Check and clean air filters in VME chassis  |  |  |
| 3 | AGS     |  |              | <b>Fix 30mv offset in D/A spill servo system 928</b>                                      |  |  |

**BAF**

|   |             |      |              |  |                                    |    |
|---|-------------|------|--------------|--|------------------------------------|----|
| 1 | Bldg. 911B  | None | 3/4 to 3/8   | Install and test controls hardware for BAF PP / Controls | None                               | No |
| 2 | Bldg. 914   | None | 4/29 to 5/2  | Install and test controls hardware for BAF PP / Controls | None                               | No |
| 3 | Bldg. 930 U | None | 5/20 to 6/4  | Install and test controls hardware for BAF PP / Controls | None                               | No |
| 4 | Bldg. 957   | None | 6/3 to 6/19  | Install and test controls hardware for BAF PP / Controls | None                               | No |
| 5 | Bldg. 930A  | None | 6/24 to 7/12 | Install and test controls hardware for BAF PP / Controls | PS Group must have racks in place. | No |
| 6 | Bldg. 958   | None | 7/29 to 8/14 | Install and test controls hardware for BAF PP / Controls | None                               | No |

**C-A DEPARTMENT MAINTENANCE, REPAIR AND MODIFICATION PROGRAM**  
**JOBS SCHEDULING REQUEST**

**GROUP: Access Controls – D. Meany (ext. 5329, Pager 0361), N. Williams (ext. 5346, Pager 0554)**

| <b><u>JOB#</u></b> | <b><u>AREA<br/>WHERE<br/>WORK IS<br/>TO BE<br/>DONE</u></b> | <b><u>POSSIBLE<br/>DISRUPTIONS<br/>TO<br/>OTHERS</u></b> | <b><u>TIME<br/>PERIOD</u></b> | <b><u>JOB DESCRIPTION, RESPONSIBLE<br/>PERSON &amp; GROUP DOING THE WORK</u></b> | <b><u>ADD'L.<br/>SUPPORT<br/>AND<br/>COMMENTS</u></b> | <b><u>HP<br/>SURVEY<br/>AND<br/>DETAILS</u></b> |
|--------------------|---|--|-------------------------------|--|---|---|
| 1                  | SEB Swyd  |  | 16 hrs.                       | Replace slide bolts with electric  |   |   |
| 2                  | A Tgt   |  | 16 hrs.                       | Replace slide bolts with electric  |   |   |
| 3                  | South Gate  |  | 16 hrs.                       | Replace slide bolts with electric  |   |   |
| 4                  | B Tgt u/s gate  |  | 16 hrs.                       | Replace slide bolts with electric  |   |   |
| 5                  | B Tgt d/s gate  |  | 16 hrs.                       | Replace slide bolts with electric  |   |   |
| 6                  | D Sep Gate 1  |  | 16 hrs.                       | Replace slide bolts with electric  |   |   |
| 7                  | D Sep Gate 2  |  | 16 hrs.                       | Replace slide bolts with electric  |   |   |
| 8                  | B1/B5   |  | 1 wk                          | Remove logic boxes and associated equipment                                      |   |   |
| 9                  | A2  |  | 1 wk                          | Remove logic boxes and associated equipment                                      |   |   |
| 10                 | North Gate  |  | 16 hrs.                       | Replace slide bolts with electric  |   |   |
| 11                 | C4  |  | 16 hrs.                       | Recertification of Exp. C4   | FES Group   |   |

**C-A DEPARTMENT MAINTENANCE, REPAIR AND MODIFICATION PROGRAM**  
**JOBS SCHEDULING REQUEST**

**GROUP: Beam Components & Instrumentation – D. Lehn (ext. 4542, Pager 4276), Tony**  
**Curcio (ext. 4659, Pager 4270)**

| <b><u>JOB#</u></b> | <b><u>AREA<br/>WHERE<br/>WORK IS<br/>TO BE<br/>DONE</u></b> | <b><u>POSSIBLE<br/>DISRUPTIONS<br/>TO<br/>OTHERS</u></b> | <b><u>TIME<br/>PERIOD</u></b> | <b><u>JOB DESCRIPTION, RESPONSIBLE<br/>PERSON &amp; GROUP DOING THE WORK</u></b>  | <b><u>ADD'L.<br/>SUPPORT<br/>AND<br/>COMMENTS</u></b>   | <b><u>HP<br/>SURVEY<br/>AND<br/>DETAILS</u></b> |
|--------------------|---|--|-------------------------------|---|---|---|
| 1                  | AGS Ring 928  |  | a) 160 hrs.<br>b) 120 hrs.    | Ring Grounds –<br>a) Install new monitoring system (VME)<br>b) Inspect and replace RC's Shorts, DCCT's and Hybrids as necessary   | HP-Survey<br>Controls<br>Group  |   |
| 2                  | AGS Ring  |  | 32 hrs.                       | C10 SEC – Inspect cables – replace as necessary<br>- Install/Move Ion Chamber ??  | HP-Survey<br>Cable Crew   |   |
| 3                  | AGS Ring  |  | 4 hrs.                        | Video – Replace BNC feedthroughs at 8/18 locations as necessary   | HP-Survey<br>Waste Group  |   |
| 4                  | AGS Ring  |  | 480 hrs.                      | F10 Septum – Build/Test/Install new septum  | HP-Survey, Water<br>Group, Riggers,<br>P.S. Group   |   |
| 5                  | AGS Ring  |  | 40 hrs.                       | PUE Pre Amps – F20 & G7<br>a) – Install new Pre-Amps and Enclosures<br>b) – Install new control cables  | HP-Survey<br>Cable Crew<br>Waste Group  |   |
| 6                  | AGS Ring  |  | 4 hrs.                        | H10 Septum – Install new video light assembly   | HP-Survey<br>Waste Group  |   |
| 7                  | AGS Ring  |  | 4 hrs.                        | UF1 –<br>a) Install inline valves on air lines<br>b) Upgrade/Install neutral density filter assembly<br>c) Remove failed fiber optic cable  | HP-Survey<br>Waste Group  |   |
| 8                  | AGS Ring<br>923 "PIT"                                       |  | 40 hrs.                       | Cleanup/Removal of legacy waste –<br>a) North Conjunction<br>b) C14 Alcove<br>c) 923 "PIT"  | HP-Survey<br>Waste Group  |   |
| 9                  | AGS Ring<br>B18 House<br>A10 House                          |  | 16 hrs.                       | IPM –<br>a) Replace/Repair servo valves for C5 & E15 IPM's as necessary<br>b) Modify vacuum ports as necessary<br>c) Investigate electronics upgrades   | HP-Survey<br>Vacuum<br>Group  |   |
| 10                 | AGS Ring<br>J18 House                                       |  | 4 hrs.                        | J10 Beam Dump – resolve TC issues   | HP-Survey   |   |
| 11                 | AGS Ring<br>HITL 2  |  | 40 hrs.                       | C20 Polarimeter – Support Spin group with changes to control system   | HP-Survey<br>SPIN Group   |   |
| 12                 | AGS Ring<br>HITL 2  |  | 480 hrs.                      | C15 Polarimeter –<br>a) Support installation of new polarimeter including cabling for detectors & motion control<br>b) Installation of above device including fabrication of parts as necessary | HP-Survey,<br>Vacuum Group,<br>Spin Group,<br>Survey Group,<br>Cable Crew,<br>Electricians,<br>Grounds Crew |   |
| 13                 | AGS Ring  |  | 2 hrs.                        | CF100 – Perform maintenance on motor drive  | HP-Survey   |   |
| 14                 | AGS Ring  |  | 16 hrs.                       | CF011 –<br>a) Perform maintenance on motor drive<br>b) Investigate offset in flag position  | HP-Survey<br>Kevin Brown  |   |

|    |                       |                                   |  |   |
|----|-----------------------|-----------------------------------|--|---|
| 15 | AGS Ring              | 40 hrs.                           | RLRM – Investigate Argon leaks in 4 of 6 chains and repair as necessary  | HP-Survey<br>Water Group  |
| 16 | AGS                   | Deferred                          | H20 Septum – Build and test spare septum   |   |
| 17 | 911A                  | 8 hrs.                            | Video – Replace all bad monitors in MCR  |   |
| 18 | 911B                  | 160 hrs.                          | Video –<br>a) Upgrade of CATV system to single trunk<br>b) Troubleshoot/Repair Horizon Video switch  |   |
| 19 | AGS                   | 40 hrs.                           | Transverse Dampers – Retube and test Dampers   | Waste Group   |
| 20 | AGS Ring<br>A10 House | 16 hrs.                           | A20 Flying Wire –<br>a) Setup dual PMT's in ring<br>b) Setup dual controls in A10 House  | HP-Survey   |
| 21 | AGS Ring<br>919B      | 160 hrs.                          | Sextupole Magnets –<br>a) Build up spare magnets<br>b) Swap out all "13" locations in ring   | HP-Survey,<br>Riggers, Water<br>Group, PS Group,<br>Survey Group,<br>Vacuum Group |
| 22 | AGS Ring              | a) TBD<br>b) 8 hrs.<br>c) 16 hrs. | H20 Septum –<br>a) Install new motion control system including cables for Septum and flag drive<br>b) Remove Septum from girder for inspection and reinstall on girder when inspection completed | HP-Survey<br>Survey Group<br>Riggers, Cable<br>Crew                               |
| 23 | AGS Ring              | a) TBD<br>b) 4 hrs.<br>c) TBD     | F5 Septum –<br>a) Install new motion control system including cables for Septum and flag drive<br>b) Replace loss monitors<br>c) Setup new video controls  | HP-Survey<br>Cable Crew<br>Waste Group  |
| 24 | AGS Ring              | a) TBD<br>b) 4 hrs.<br>c) TBD     | F10 Septum –<br>a) Install new motion control system including cables for Septum and flag drive<br>b) Replace loss monitors<br>c) Setup new video controls                                       | HP-Survey<br>Cable Crew<br>Waste Group  |
| 25 | AGS Ring              | TBD                               | Tune Meter –<br>a) Remove old Tune Meter<br>b) Build new Tune Meter<br>c) Install new Tune Meter   | HP-Survey<br>Riggers  |
| 26 | AGS Ring              | TBD                               | E15 Flag –<br>a) Install new motion control system including cables  | HP-Survey<br>Cable Crew   |
| 27 | AGS Ring              | TBD                               | L20 Septum Flag –<br>a) Install new motion control system including cables   | HP-Survey<br>Cable Crew   |
| 28 | AGS 911B              | 16 hrs.                           | Current Transformers – Run new cable from 911B to 930UEB and terminate   | Cable Crew  |
| 29 | AGS Ring              | 2 hrs.                            | A5 Loss Monitor – Tie into gas system  | HP-Survey   |
| 30 | AGS                   | 640 hrs.                          | Siemens – Support Repairs  |   |
| 31 | AGS                   | Combined<br>w/Siemens             | WESTINGHOUSE – Support<br>Maintenance/Repairs  |   |
| 32 | AGS Ring              | 4 hrs.                            | C20 – Remove Loss Monitor Array  | HP-Survey   |
| 33 | AGS Ring              | 4 hrs.                            | E15 – Support removal of Luminescence test   | HP-Survey   |

|    |                |          |   |   |
|----|----------------|----------|---|---|
| 34 | AGS            | 240 hrs. | AC Dipole – Support Installation/Modifications  |   |
| 1  | 957 BAF        | 320 hrs. | Building 957 – Complete installation of all necessary electronics including testing and commissioning             | Controls Group Cable Crew               |
| 2  | 958 BAF        | 24 hrs.  | Building 958 – Complete installation of all necessary electronics including testing and commissioning             | Controls Group BAF Personnel Cable Crew |
| 3  | 930A BAF       | 24 hrs.  | Building 930A – Complete tie in from building 957   | Cable Crew                              |
| 4  | BAF Tunnel     | 80 hrs.  | R63 Location – Install, Test and commission all necessary instrumentation   | Controls Group Cable Crew               |
| 5  | BAF Tunnel     | 80 hrs.  | Beam Plug – Install, Test and commission Beam Plug  | Controls Group Cable Crew               |
| 6  | BAF Tunnel     | 80 hrs.  | R92 Location – Install, Test and commission all necessary instrumentation   | Controls Group Cable Crew               |
| 7  | BAF Tunnel     | 80 hrs.  | R158 Location – Install, Test and commission all necessary instrumentation  | Controls Group Cable Crew               |
| 8  | BAF Tunnel     | 80 hrs.  | R188 Location – Install, Test and commission all necessary instrumentation  | Controls Group Cable Crew               |
| 9  | BAF Tunnel     | 80 hrs.  | R300 Location – Install, Test & commission all necessary instrumentation  | Controls Group Cable Crew               |
| 10 | BAF Tunnel     | 80 hrs.  | R302 Location – Install, Test and commission all necessary instrumentation  | Controls Group Cable Crew               |
| 11 | BAF Tunnel     | 24 hrs.  | Target Area – Install, Test and commission all necessary instrumentation  | Controls Group BAF Personnel Cable Crew |
| 12 | BAF Tunnel 957 | 24 hrs.  | Instrumentation Junction Box – Install and terminate all spare cables   | Electricians Cable Crew                 |
| 13 | BAF Tunnel 957 | 16 hrs.  | Ar/CO2 Gas System – Install, test and commission gas system   |   |
| 14 | 957            | 16 hrs.  | Video – Install equipment needed to tie in BAF to C-A CATV system   |   |
| 1  | Switchyard     | 16 hrs.  | DF146 – Remove/Rebuild/Reinstall flag drive motor assembly  | HP-Survey EAG                           |
| 2  | Switchyard     | 16 hrs.  | AF124 – Investigate optics/potential upgrade  | HP-Survey                               |
| 3  | Switchyard     | 8 hrs.   | Flag Drives – Perform maintenance on all drives - investigate possible upgrades                                   | HP-Survey                               |
| 4  | C-Line         |          | LESB3 Separator –<br>a) Repair Power Supplies<br>b) Perform Turbo Maintenance<br>c) Work on Local/Remote Switches | HP-Survey                               |

|   |                     |          |  |  |
|---|---------------------|----------|--|--|
|   |                     |          | d) Filter power supply oil   |  |
| 5 | C-Line              |          | LESB2 Separator –<br>a) Repair Power Supplies<br>b) Perform Turbo Maintenance<br>c) Work on Local/Remote Switches<br>d) Filter power supply oil  | HP-Survey  |
| 6 | D-Line              |          | 2GEV Separator –<br>a) Repair Power Supplies   | HP-Survey  |
|   |                     |          | b) Perform Turbo Maintenance<br>c) Work on Local/Remote Switches<br>d) Filter power supply oil   |  |
| 7 | A-Line              | 160 hrs. | NASA – Setup/Test as necessary for NASA running.<br>a) Install Integrator protection daughter boards<br>b) Checkout of all necessary video<br>c) Setup of all Loss Monitors<br>d) Setup of all necessary gains                             |  |
| 1 | TTB                 | 40 hrs.  | Instrumentation – Inspect and Test all BIPS (Beam Instrument Packages) prior to RHIC startup   | Tandem Personnel                                     |
| 2 | TTB                 | 24 hrs.  | Multiwires – Install Integrator protection daughter boards and test  |  |
| 1 | ATR                 | 40 hrs.  | Flag Profile Monitors – UF2, UF3, UF4, UF5, WF1, WF2 and WF3<br>a) Install inline valves on air lines<br>b) Upgrade all neutral density filter assemblies  | HP-Survey  |
| 2 | ATR                 | 8 hrs.   | BLM System – Perform checkout prior to beam  | HP-Survey  |
| 3 | ATR                 | 16 hrs.  | BLM System – Install Integrator protection daughter boards and test  |  |
| 1 | Booster Ring 930UEB | 800 hrs. | RLRM System –<br>a) Install new 200V bias boards<br>b) Investigate Gas alarm contacts<br>c) Upgrade controls<br>d) Investigate/Repair all Argon leaks<br>e) Upgrade Loss Monitor boots/fittings<br>f) Replace all remaining poly-flo lines | HP-Survey<br>Water Group<br>Waste Group              |
| 2 | 930UEB              | 40 hrs.  | Instrumentation Racks – Clean up racks and cable trays   |  |
| 3 | Booster Ring 930A   | 32 hrs.  | IPM –<br>a) Move upstream 3 ft.<br>b) Move all associated cabling/equipment<br>c) Setup new MCP Bias Supplies<br>d) Replace MCP's?<br>e) Upgrade Data Acquisition System   | HP-Survey<br>Vacuum<br>Group Riggers<br>Survey Group |
| 4 | Booster Ring        | 16 hrs.  | D3 Kicker – Remove from BOOSTER Ring   | HP-Survey<br>Vacuum<br>Group Riggers                 |

|    |                                    |          |  |  |
|----|------------------------------------|----------|--|--|
| 5  | Booster                            | Deferred | F6 Septum – Build spare septum   |  |
| 6  | Booster Ring                       | 32 hrs.  | D4 ¼ Cell – Remove/Modify/Reinstall  | HP-Survey Riggers<br>Water Group<br>Survey Group PS<br>Group Vacuum<br>Group     |
| 7  | Booster Ring                       | 24 hrs.  | D6 ¼ Cell – Remove/Modify/Reinstall  | HP-Survey Riggers<br>Water Group<br>Survey Group PS<br>Group Vacuum<br>Group     |
| 8  | Booster Ring                       | 24 hrs.  | D6 Beam Dump – Remove from Booster Ring  | HP-Survey Riggers<br>Water Group<br>Survey Group PS<br>Group Vacuum<br>Group     |
| 9  | Booster Ring                       | 16 hrs.  | D6 Wall Current Monitor – Remove from ring   | HP-Survey Riggers<br>Water Group,<br>Vacuum Group                                |
| 10 | Booster Ring                       | 32 hrs.  | D7 ½ Cell – Remove/Modify/Reinstall  | HP-Survey<br>Riggers, Water<br>Group, Survey<br>Group, PS Group,<br>Vacuum Group |
| 11 | Booster Ring                       | 40 hrs.  | D3 Septum – Install New Device   | HP-Survey<br>Riggers, Water<br>Group, Survey<br>Group, PS Group,<br>Vacuum Group |
| 12 | Booster Ring                       | 160 hrs. | D6 Septum –<br>a) Install new device including Foil Stripper,<br>Collimator and Flag | HP-Survey<br>Riggers, Water<br>Group, Survey<br>Group, PS Group,<br>Vacuum Group |
| 13 | Booster Ring                       | 32 hrs.  | B6 Beam Dump – Install new beam dump   | HP-Survey Riggers<br>Water Group<br>Survey Group PS<br>Group Vacuum<br>Group     |
| 14 | Booster Ring                       | 16 hrs.  | B6 Wall Current Monitor – Install new device   | HP-Survey Riggers<br>Water Group<br>Survey Group PS<br>Group Vacuum<br>Group     |
| 15 | Booster Ring                       | 80 hrs.  | D6 Video – Install, Setup and Test all new<br>equipment                              | Cable Crew   |
| 16 | Booster Ring                       | 32 hrs.  | D6 Collimator/Foil Stripper – Install, Setup and<br>Test all new equipment           | Cable Crew   |
| 17 | Booster Ring                       | 160 hrs. | D3 Septum Motion – Install, Setup and Test all<br>new Equipment                      | Cable Crew   |
| 18 | Booster Ring                       | 40 hrs.  | Ring Grounds – Check for shorts and verify<br>grounding throughout the BOOSTER Ring  |  |
| 19 | Booster Ring<br>914                | 24 hrs.  | F6 and BTA Video – Setup and Test video<br>controls (Lights, actuators, filters)     |  |
| 20 | Booster<br>914/930UEB<br>A10 House | 16 hrs.  | Multiwires – Install Integrator Protection<br>Daughter boards and Test               |  |





**C-A DEPARTMENT MAINTENANCE, REPAIR AND MODIFICATION PROGRAM**  
**JOBS SCHEDULING REQUEST**

**GROUP: LINAC – V. LoDestro (ext. 5005, Pager 7264), B. Brisco (ext. 5007, Pager 4225)**

| <b><u>JOB#</u></b> | <b><u>AREA<br/>WHERE<br/>WORK IS<br/>TO BE<br/>DONE</u></b> | <b><u>POSSIBLE<br/>DISRUPTIONS<br/>TO<br/>OTHERS</u></b> | <b><u>TIME<br/>PERIOD</u></b> | <b><u>JOB DESCRIPTION, RESPONSIBLE<br/>PERSON &amp; GROUP DOING THE WORK</u></b> | <b><u>ADD'L.<br/>SUPPORT<br/>AND<br/>COMMENTS</u></b> | <b><u>HP<br/>SURVEY<br/>AND<br/>DETAILS</u></b> |
|--------------------|---|--|-------------------------------|--|---|---|
| 1                  | LINAC   | None   | 40 hrs.<br>(IP)               | Change Ion Pumps in Tank 6 6-1, 6-6, 6-5 and Probe                               | Vac   | SS01002   |
| 2                  | LINAC   | None   | 40 hrs.                       | Change Ion Pump in Tank 1 1-4  | Vac   | SS01002   |
| 3                  | LINAC   | None   | 80 hrs.                       | Remove Mod 4 7835 PS for repair  | None  | None  |
| 4                  | LINAC   | None   | 40 hrs.                       | Test and Install new AGC Amp in RFQ LLRF   | None  | None  |
| 5                  | LINAC   | None   | 80 hrs.                       | Improve RFQ Fast Phase Loop Response   | None  | None  |
| 6                  | LINAC   | None   | 40 hrs.                       | Calibrate Rf Amp & Phase System  | None  | None  |
| 7                  | LINAC   | None   | 80 hrs.                       | Put Tank Ion Pumps on Control System   | None  | None  |
| 8                  | LINAC   | None   | 40 hrs.                       | Install controls for resetting ion pumps   | None  | None  |
| 9                  | LINAC   | None   | 40 hrs.                       | Complete installation of new SS Chopper  | None  | None  |
| 10                 | LINAC   | None   | 120 hrs.                      | Add new Malf Bucket to BLIP and Rewire   | None  | None  |
| 11                 | LINAC   | None   | 40 hrs.                       | Repair BLIP 1 <sup>st</sup> Multiwire  | Vac   | SS01002   |
| 12                 | LINAC   | None   | 120 hrs.                      | Complete 7835 input Tuner Fermi Design   | None  | None  |
| 13                 | LINAC   | None   | 120 hrs.                      | Complete Construction of SS Modulators   | None  | None  |
| 14                 | LINAC   | None   | 80 hrs.                       | Install ACME supply for HEBT 2 Quad  | None  | None  |
| 15                 | LINAC   | None   | 120 hrs.                      | Add Water Cooling to 7835 Supplies   | None  | None  |
| 16                 | LINAC   | None   | 80 hrs.                       | Add flow switch interlock to 7835 Water  | None  | None  |
| 17                 | LINAC   | None   | 80 hrs.                       | Make new LEBT Solenoid   | None  | None  |
| 18                 | LINAC   | None   | 40 hrs.                       | Prototype and Test new solenoid pulser PS  | None  | None  |
| 19                 | LINAC   | None   | 8 hrs.                        | Install flow switches on Pol BMS   | None  | None  |
| 20                 | LINAC   | None   | 2 hrs.                        | Change DH19 Datacon Card readback  | None  | None  |
| 21                 | LINAC   | None   | 4 hrs.                        | Repair Argon Leak in BLIP  | None  | SS01002   |
| 22                 | LINAC   | None   | 4 hrs.                        | Repair cable on BLIP Horz. Multiwire   | None  | SS01002   |
| 23                 | LINAC   | None   | 80 hrs.                       | Rewire AC Overloads on 50KV Supplies   | None  | None  |

|    |       |      |          |  |        |         |
|----|-------|------|----------|--|--------|---------|
| 24 | LINAC | None | 40 hrs.  | Add Cables to BLIP readback chassis          | None   | None    |
| 25 | LINAC | None | 80 hrs.  | Check all cap bank door AC Filters           | None   | None    |
| 26 | LINAC | None | 80 hrs.  | Flow Check Tanks 2, 6, 7 and Measure Flows   | Water  | None    |
| 27 | LINAC | None | 200 hrs. | Replace Mixing Valves on all tanks           | Water  | None    |
| 28 | LINAC | None | 200 hrs. | Replace Nitrogen Dewar                       | Cryo   | None    |
| 29 | LINAC | None | 8 hrs.   | Check operation of backup Rf Pump            | Water  | None    |
| 30 | LINAC | None | 80 hrs.  | Replace Motor Control Station for RF Pump    | Elect. | None    |
| 31 | LINAC | None | 4 hrs.   | Check HEBT Vac. Valves Air Lines             | None   | None    |
| 32 | LINAC | None | 8 hrs.   | Change Air Solenoids on TK1 Stop and Vac     | None   | None    |
| 33 | LINAC | None | 8 hrs.   | Jumper out 3 air switches on all 50 KV PS    | None   | None    |
| 34 | LINAC | None | 40 hrs.  | Change all driver anode columns              | None   | None    |
| 35 | LINAC | None | 40 hrs.  | Remove Hoses and Volt Dividers in Modulators | None   | None    |
| 36 | LINAC | None | 8 hrs.   | Check Mod 5 Quad Flat-Top Bucket             | None   | None    |
| 37 | LINAC | None | 40 hrs.  | Check all Taper Pin Block in Term Room       | None   | None    |
| 38 | LINAC | None | 20 hrs.  | Change Bleed Resistors on All ACMES          | None   | None    |
| 39 | LINAC | None | 8 hrs.   | Replace REF 1 <sup>st</sup> Harp             | VAC    | SS01002 |
| 40 | LINAC | None | 20 hrs.  | Redo Wiring For LTB Mags                     | None   | SS01002 |
| 41 | LINAC | None | 16 hrs.  | Check Movement of All Tank Tuners            | None   | SS01002 |
| 42 | LINAC | None | 80 hrs.  | Redo HEBT Vac Valve For Polarimeter          | VAC    | SS01002 |
| 43 | LINAC | None | 40 hrs.  | Check all Voltage Dividers in Drivers        | None   | None    |
| 44 | LINAC | None | 120 hrs. | Cal All 7835 Filament Leads with Shunt       | None   | None    |
| 45 | LINAC | None | 2 hrs.   | Remove Pulsing Switch from Old Timing        | None   | None    |
| 46 | LINAC | None | 80 hrs.  | Add Pulsing Auto Reset to PLC all Mods       | None   | None    |
| 47 | LINAC | None | 40 hrs.  | Replace all measure flows in HEBT            | Water  | SS01002 |
| 48 | LINAC | None | 80 hrs.  | Replace Windows Bunchers 1, 2, 3             | None   | None    |
| 49 | LINAC | None | 20 hrs.  | Modify all ICR off Signals into PLC's        | None   | None    |
| 50 | LINAC | None | 80 hrs.  | Run SNS Foil Test in LEBT                    | None   | None    |
| 51 | LINAC | None | 40 hrs.  | Rebuild 7835 Cavity 5 from base plate up     | None   | None    |
| 52 | LINAC | None | 240 hrs. | Install PLC Controls in 7835 PS              | None   | None    |
| 53 | LINAC | None | 240 hrs. | Install PLC Controls in Cap Banks            | None   | None    |
| 54 | LINAC | None | 16 hrs.  | Install New RF Input Cables to Drivers       | None   | None    |

|    |       |      |          |   |      |         |
|----|-------|------|----------|---|------|---------|
| 55 | LINAC | None | 80 hrs.  | Build and Install Malf Cards for Polar Line | None | None    |
| 56 | LINAC | None | 8 hrs.   | Install new diode pack in Vac Ion PS        | None | None    |
| 57 | LINAC | None | 20 hrs.  | Install Savawatt Switch in Mod Control      | None | None    |
| 58 | LINAC | None | 80 hrs.  | Modify HEBT Quad AC Panel for 220 VAC       | None | None    |
| 59 | LINAC | None | 8 hrs.   | Modify Gate Trigger Card 50KVPS R42         | None | None    |
| 60 | LINAC | None | 20 hrs.  | Modify Driver Screen Resistors              | None | None    |
| 61 | LINAC | None | 8 hrs.   | Repair MOD 2 AC Quad Breaker                | None | None    |
| 62 | LINAC | None | 4 hrs.   | Replace 12V PS for BLIP Security M16A15     | None | None    |
| 63 | LINAC | None | 40 hrs.  | Install Reset Panel View in MCR             | None | None    |
| 64 | LINAC | None | 40 hrs.  | Change Ion Pump 8-6 And Check Collars       | VAC  | SS01002 |
| 65 | LINAC | None | 16 hrs.  | Check all Driver P.S. Output Resistors      | None | None    |
| 66 | LINAC | None | 40 hrs.  | Replace all on relays for driver P.S.       | None | None    |
| 67 | LINAC | None | 160 hrs. | Resize source rack for OPPIS Space          | None | None    |
| 68 | LINAC | None | 20 hrs.  | Replace source ISO XFMR                     | None | None    |
| 69 | LINAC | None | 20 hrs.  | Install new Racks for POL. Protron          | None | None    |
| 70 | LINAC | None | 8 hrs.   | Check Water Clamp Mod 3 V2 8618 Socket      | None | None    |
| 71 | LINAC | None | 8 hrs.   | Lower Valve of Caps on Phase Buckets        | None | None    |
| 72 | LINAC | None | 2 hrs.   | Change Datacon Card For Solenoid 1          | None | None    |
| 73 | LINAC | None | 8 hrs.   | Remove Old SCR Control Driver HV            | None | None    |
| 74 | LINAC | None | 8 hrs.   | Repair GND Switch on RFQ                    | None | None    |
| 75 | LINAC | None | 80 hrs.  | Make new Ionizer Cell Coils for OPPIS       | None | None    |
| 76 | LINAC | None | 80 hrs.  | Make Spare EXT P.S. with BEHLKE Switch      | None | None    |
| 77 | LINAC | None | 80 hrs.  | Make Chopper with BEHLKE Switch             | None | None    |
| 78 | LINAC | None | 40 hrs.  | Install new EMITT Box in OPPIS              | None | None    |
| 79 | LINAC | None | 80 hrs.  | Install new Harp in HEBT for OPPIS          | VAC  | SS01002 |
| 80 | LINAC | None | 160 hrs. | Update LINAC Timing to REV1 and Recable     | None | None    |
| 81 | LINAC | None | 40 hrs.  | Set Up Faraday Cup and Control for Tank 1   | None | None    |
| 82 | LINAC | None | 200 hrs. | SNS Foil Test and Beam Optics study in LEBT | None | None    |
| 83 | LINAC | None | 160 hrs. | Upgrade Fast Chopper Controls to VME        | None | None    |
| 84 | LINAC | None | 40 hrs.  | Add Extra Steering to HEBT for OPPIS        | None | None    |
| 85 | LINAC | None | 160 hrs. | Create new fast beam interrupt design       | None | None    |

|    |       |      |           |                                 |      |      |
|----|-------|------|-----------|---------------------------------|------|------|
| 86 | LINAC | None | 500 hrs.  | Set Gas Jet Test Stand for RHIC | None | None |
| 87 | LINAC | None | 1968 hrs. | LINAC Planned Maintenance       | None | None |

**C-A DEPARTMENT MAINTENANCE, REPAIR AND MODIFICATION PROGRAM**  
**JOBS SCHEDULING REQUEST**

**GROUP: Main Ring P.S. Systems – M. Bannon (ext. 7704, Pager 4224), I. Marneris (ext. 7027, Pager 4255)**

| <b><u>JOB#</u></b> | <b><u>AREA<br/>WHERE<br/>WORK IS<br/>TO BE<br/>DONE</u></b> | <b><u>POSSIBLE<br/>DISRUPTIONS<br/>TO<br/>OTHERS</u></b> | <b><u>TIME<br/>PERIOD</u></b> | <b><u>JOB DESCRIPTION, RESPONSIBLE<br/>PERSON &amp; GROUP DOING THE WORK</u></b> | <b><u>ADD'L.<br/>SUPPORT<br/>AND<br/>COMMENTS</u></b> | <b><u>HP<br/>SURVEY<br/>AND<br/>DETAILS</u></b> |
|--------------------|---|--|-------------------------------|--|---|---|
|--------------------|---|--|-------------------------------|--|---|---|

## AGS

|   |  |  |  |   |  |  |
|---|--|--|--|---|--|--|
| 1 |  |  |  | F5 Power Supply going over for loose connections  |  |  |
| 2 |  |  |  | F5 Magnet – Water flow valve replacement or rebuild   |  |  |
| 3 |  |  |  | Horz. Sextupole Magnets replaced and string modified for the F7 Link Brd. In F10 House        |  |  |
| 4 |  |  |  | Test new horz. Power supply   |  |  |
| 5 |  |  |  | Sextupole magnet interlock rack built and installed   |  |  |
| 6 |  |  |  | New interlock cables pulled into the AGS Ring to each of the 28 sextupole magnets in the ring |  |  |
| 7 |  |  |  | B13, J13, F13 Aux sextupole PS control remote and new Ref. Controls                           |  |  |
| 8 |  |  |  | Possible D11 Main Dipole remove from girder (Vac. Groups Call)                                |  |  |

## BOOSTER

|             |  |  |  |   |  |  |
|-------------|--|--|--|---|--|--|
|             |  |  |  | BMM Hipot   |  |  |
|             |  |  |  | D6 MM ¼ Cell disconnect all wiring and label wires clearly so they can be reinstalled properly with no errors.  |  |  |
|             |  |  |  | D4 MM ½ Cell disconnect all wiring and label wires clearly so they can be reinstalled properly with no errors   |  |  |
|             |  |  |  | 930A Console area temporarily remove RK's 4940, 4941, 4942  |  |  |
|             |  |  |  | 930A Console area install new resistance chassis rack for D3 and D6 Septum Magnets  |  |  |
|             |  |  |  | Label and remove all wiring for the horz. and vert. Tune PS in Bldg. 930A remove output filter on the top of PS so PS can pass under cable tray when being removed from 930 console area. |  |  |
| <b>IP 7</b> |  |  |  | Pre Test D3 and D6 PS's   |  |  |
|             |  |  |  | Hook up and test new BAF D3 and D6 Septum PS on real load after all hookup is completed   |  |  |
|             |  |  |  | Reinstall 930A Console area   |  |  |

|              |  |
|--------------|--|
| 10           | Prepare active filter PS and cables to inductor in Sta. 1 open bandwidth of PS to that of Siemens active filter PS |
| 11           | BMMPS Phase shift and Rect. Transformers<br>Nitrogen system alarm monitor to PLC                                   |
| 12           | LTB Water Flow concerns  |
| 13           | BMMPS NWL Transformer check oil levels   |
| 14           | Swap 2 BMMPS transformers with the repaired one's  |
| 15           | Send the 2 that were removed to GE for estimate on repairs and upgrades  |
| <b>IP 16</b> | Test 2 new Quad Tune PS in 930 UEB. (horz. & vert.) (Inverpowers)  |
| <b>IP 17</b> | Test 2 new Sextupole PS in 930 UEB (Inverpowers)   |
| <b>IP 18</b> | Test 7 new bump power supplies in 930 UEB (Danfysik)   |
| 19           | Spill servo and act filter humb bucket installation  |
| 20           | Test 2 new BAF Corrector PS's  |
| 21           | DH1 Magnet Interlock harness check for short to Gnd. Or Bus. (Megger)  |
| 22           | BMMPS inspection – PM  |
| 23           | 930A Filter inductor area cleanup and wipe down  |
| 24           | QV1 Cable Junction Block in Booster Ring must be replaced  |

## **BOOSTER / AGS UPS'S**

Preventative maintenance on AGS and Booster UPS'S at the following locations;

|    |                               |
|----|-------------------------------|
| 1  | 911 MCR – Lieberts            |
| 2  | 911 UPS1 – Mitsubishi         |
| 3  | EAO-A – Lieberts              |
| 4  | E10 House – Lieberts          |
| 5  | 928 Siemens – Lieberts        |
| 6  | 928 Cycloconverter – Lieberts |
| 7  | 929 – RF 1                    |
| 8  | 929 – RF 2                    |
| 9  | H10 House – Lieberts          |
| 10 | A10 House – Lieberts          |

|    |                                 |
|----|---------------------------------|
| 11 | 930A Booster – Lieberts         |
| 12 | 930 Linac – Lieberts            |
| 13 | 914 – Lieberts                  |
| 14 | 911 – Cyberex – Security System |
| 15 | 919 – G-2                       |
| 16 | 911-B UPS2 – Mitsubishi         |
| 17 | 911W – Speed Room               |

Do Battery Impedance Checks and Clean All Units

## RHIC

Preventative maintenance on RHIC UPS's located at the following locations;

|       |                     |   |                       |
|-------|---------------------|---|-----------------------|
| 1     |                     | 1012A – 1012ACR UPS-Mitsubishi – 10 KVA   |                       |
| C 2   |                     | 1012A – RHIC Cryo PLC12A-Mitsubishi – 6KVA – needs to be moved to control room and bypass switch installed  | Contract Electricians |
| C 3   |                     | 1002B – RHIC Cryo PLC2B-Mitsubishi – 6 KVA  |                       |
| 4     | Maintenance Replace | 1004B – 1004BCR UPS – Mitsubishi – 10KVA – need bypass switch wired in. 1004B RHIC Cryo PLC4B UPS controlled Power  | Contract Electricians |
| 5     | Replace             | 1005H – RHIC Cryo PLC5H – Controlled Power  | Contract Electricians |
| 6     | Replace             | 1005R – RHIC Cryo PLC5R – Controlled Power  | Contract Electricians |
| C 7   |                     | 1005S – 1005S Cryo VAX-B-Mitsubishi – 6KVA  |                       |
| 8     |                     | 1005S – 1005S Cryo/Network – Mitsubishi – 20 KVA  |                       |
| C 9   |                     | 1006B – RHIC Cryo PLC6B – Mitsubishi 6KVA   |                       |
| IP 10 | Replace             | 1008B – RHIC Cryo PLC8B – Controlled Power  | Contract Electricians |
| 11    |                     | 1010A – 1010ACR UPS-Mitsubishi – 10 KVA   |                       |
| C 12  |                     | 1010A – RHIC Cryo PLC10A-Mitsubishi – 6KVA – Maintenance  | Tech                  |
| C 13  |                     | 1000P – RHIC X-Y PS Control – Mitsubishi – 15 KVA – Maintenance   | Tech                  |
| 14    |                     | Possibly changing all controlled power UPS's to Mitsubishi's also finishing those UPS's that do not have maint. Bypass switches.<br>Installing new 6KVA Mitsubishi UPS's<br>Installing new 6KVA UPS's in RHIC Alcoves | Electrician           |
| 15    |                     | 1004B RHIC Cryo PLC4B – Controlled power – replace w/Mitsubishi 6KVA  | Contract Elect.       |

|              |  |                 |
|--------------|--|-----------------|
| 16           | 1005H – RHIC Cryo PLC5H – Controlled power – replace w/Mitsubishi 6KVA   | Contract Elect. |
| 17           | 1005R – RHIC Cryo PLC5R – Controlled power – replace w/Mitsubishi 6KVA   | Contract Elect. |
| 18           | 1008B – RHIC Cryo PLC8B – Controlled power – replace w/Mitsubishi 6KVA   | Contract Elect. |
| 19           | 1012A – RHIC Cryo PLC12A – Mitsubishi – 6KVA – needs to be moved to Control Room and bypass switch installed           | Electrician     |
| 20           | 1004B – 1004BCR UPS-Mitsubishi – 10KVA – need bypass switch wired in   | Electrician     |
| <b>C 21</b>  | 1002B – RHIC Controls UPS 1002BCRUPS 6KVA Mitsubishi – New   | Contract Elect. |
| <b>IP 22</b> | 1006B – RHIC Controls UPS 1006BCRUPS 6KVA Mitsubishi – New   | Contract Elect. |
| <b>IP 23</b> | 1008B – RHIC Controls UPS 1008BCRUPS 6KVA Mitsubishi – New   | Contract Elect. |
| 24           | 1004A – RHIC Controls UPS 1004CRUPS 6KVA Mitsubishi – New  | Contract Elect. |
| 25           | 1002A – RHIC Controls UPS 1002ACR 6KVA Mitsubishi – New  | Contract Elect. |
| 26           | 1005E – RHIC Controls UPS 1005ECRUPS 6KVA Mitsubishi – New   | Contract Elect. |
| 27           | 1007W – RHIC Controls UPS 1007WCRUPS 6KVA Mitsubishi – New   | Contract Elect. |
| 28           | 1001B – RHIC Controls UPS 1001BALCUPS 6KVA Mitsubishi – New  | Contract Elect. |
| 29           | 1003B – RHIC Controls UPS 1003BALCUPS 6KVA Mitsubishi – New  | Contract Elect. |
| 30           | 1005B – RHIC Controls UPS 1005BALCUPS 6KVA Mitsubishi – New  | Contract Elect. |
| 31           | 1007B – RHIC Controls UPS 1007BALCUPS 6KVA Mitsubishi – New  | Contract Elect. |
| 32           | 1009B – RHIC Controls UPS 1009BALCUPS 6KVA Mitsubishi – New  | Contract Elect. |
| 33           | 1011B – RHIC Controls UPS 1011BALCUPS 6KVA Mitsubishi – New  | Contract Elect. |
| <b>C 34</b>  | Pretest 8 new Mitsubishi 6KVA units that are in the Westinghouse 911W on charge. Make test sheet up for all new units. |                 |
| <b>IP 35</b> | Prototype Dynapower Power Supply – Upgrade to Enerpro FRG BRD  |                 |

## SIEMENS



|              |   |
|--------------|---|
| <b>IP</b> 2  | RTD's and temp monitoring additions (PLC based)   |
| <b>IP</b> 3  | Generator gap monitoring (Laser Monitoring Installation)                                    |
| <b>IP</b> 4  | New vibration equipment installation  |
| <b>IP</b> 5  | New Pressure Sensors installed PED 1,2,3  |
| <b>IP</b> 6  | New National Instrument Analog Signal Monitoring installed                                  |
| <b>IP</b> 7  | Exciter Power Supply modification for Volt and Current Monitoring (CT and PT for isolation) |
| <b>IP</b> 8  | New seals for PED #3  |
| <b>C</b> 9   | Motor brush rigging doors and TRD repaired and installed                                    |
| <b>IP</b> 10 | Generator Naughyde Replaced   |
| 11           | Rect. MD#3 Firing Bucket PS Chassis fan replaced  |
| 12           | Siemens MG Set PM's items   |

## WESTINGHOUSE

|            |  |
|------------|--|
| <b>IP1</b> | West MG Set DWGS ongoing                               |
| 2          | New SLIP Rings for the West MG Set Motor               |
| 3          | New brush holders for the Westinghouse motor – Install |
| 4          | New Exciter Ring Air Baffle installed                  |
| 5          | New Oil Heat Exchanger installed                       |
| 6          | Install Temp controlled Liq. Rheostat Water Valve      |
| 7          | Reinsulate Motor Stator                                |

**C-A DEPARTMENT MAINTENANCE, REPAIR AND MODIFICATION PROGRAM**  
**JOBS SCHEDULING REQUEST**

**GROUP: Maintenance – R. Zaharatos (ext. 7205, Pager 4281), J. Benante (ext. 2745, Pager 1207)**

| <b><u>JOB#</u></b> | <b><u>AREA<br/>WHERE<br/>WORK IS<br/>TO BE<br/>DONE</u></b> | <b><u>POSSIBLE<br/>DISRUPTIONS<br/>TO<br/>OTHERS</u></b> | <b><u>TIME<br/>PERIOD</u></b> | <b><u>JOB DESCRIPTION, RESPONSIBLE<br/>PERSON &amp; GROUP DOING THE WORK</u></b>                                 | <b><u>ADD'L.<br/>SUPPORT<br/>AND<br/>COMMENTS</u></b> | <b><u>HP<br/>SURVEY<br/>AND<br/>DETAILS</u></b> |
|--------------------|---|--|-------------------------------|--|---|---|
| 1                  | 911/913   |  |                               | Repair Wire Tunnel hatches (concrete)  | PE  |   |
| 2                  | 911 Tunnel  |  |                               | Install water tight covers for outer wire tunnel to Term. Rm.  | Carpenters  |   |
| 3                  | 913 Ring  |  |                               | Lighting upgrade – N. Conj., Emerg. Lights G-H, H10-J1   |   |   |
| 4                  | 913 Fan Hses.<br>B&D  |  |                               | Seal coat Sumps  |   |   |
| 5                  | 913 Fan Hses.   |  |                               | Install Sump Water Alarms  | FES, CAS  |   |
| 6                  | 913 Fan Hses.   |  |                               | Install remote Fan Controls. D has outside manual ctrl.  | PE/AC   |   |
| 7                  | 913 Ring  |  |                               | Re-grout ceiling at H3 (still leaking over gutter)   | Contractor  |   |
| 8                  | 913 Util. Rm<br>over Pump Rm                                |  |                               | Grout wall to wall joints and wall to floor to prevent water intrusion down rear wall of MCR                     | Contractor  |   |
| 9                  | 913 Fan Hses.   |  |                               | Exhaust Fans cert. Test – work order EP0001930   | PM  |   |
| C 10               | 913 Inner<br>Mongolia                                       |  |                               | Remove Air Cond. Unit on stand to AC shop for disposal 98-159  | PE/AC   |   |
| C 11               | 911 Hi Bay  |  |                               | Install AC unit in P.S. test lab.  | Carp./Elec. AC  |   |
| 12                 | 913 Ring  |  |                               | Fire detection system review (Lessard/Levesque) ILR 406975   | FP  |   |
| 13                 | AGS Complex   |  |                               | Storm drains upgrade review (Alan Raphael)   | PE  |   |
| C 14               | AGS Complex   |  | Aug. 26th                     | Grass cutting/trimming. Brush removal/tree trimming, including 925   | Grounds   |   |
| 15                 | AGS   |  |                               | Update device list   | Ray Z.  |   |
| C 16               | 913 E. outside  |  |                               | Remove dirt from side door and replace landscape ties  | Grounds   |   |
| 17                 | 918, 975 roof   |  |                               | Roofing Repairs  | PE/Carpenters   |   |
| 18                 | 929 roof  |  |                               | Leak near roof drain, center of room over 480 xformer  | PE/Carpenters   |   |
| 19                 | H10 House   |  |                               | Relamp   | FES/Elec.   |   |
| 20                 | 913 S. Shield   |  |                               | Estimate for flood wall with gate  | PE  |   |
| 21                 | 913 Ring  |  |                               | Identify and tag disconnected cables – Quadraplex at HI & I. RF cables at AB, CD, J, L, and LA. Action #622.1.13 | Bannon,<br>Laloudakis                                 |   |
| 22                 | 913 Ring  |  |                               | Repair telephones: B1, I13, K20, N. Conj., and all of F.   | Tel. Service  |   |
| 23                 | 913 Ring  |  |                               | Repair Circuit Breaker panel CL413B door latch (I9 aisle wall) 00-415  | Electricians  |   |

|     |               |         |  |              |
|-----|---------------|---------|--|--------------|
| 24  | 913 Ring      |         | Install elect. Box covers: F9, 17; B2, 7, 12, 18; A7, 12; K1 00-419  | Electricians |
| 25  | 913 Ring      |         | I14 aisle wall – pad unistrut protruding from wall 00-414  |              |
| 26  | 913 Ring      |         | N. Conj. Inner door – replace broken glass 00-413  |              |
| 27  | 913 Ring      |         | L9 inner wall at ceiling – replace damaged conduit 00-412  |              |
| 28  | 913 Ring      |         | C13 near girder – disconnected green gnd. Wire 00-410  |              |
| 29  | 913 Ring      |         | Escape ladders – pad and mark head height stair treds 00-409   |              |
| 30  | 913 Ring      |         | Circuit panel legends – <a href="#">BL443B@D8</a> , <a href="#">XX432@B8</a> <a href="#">DLXX433B@A8</a> , <a href="#">DL419B@L8</a> ; <a href="#">DL413D@K8</a> , <a href="#">DL412B@J8</a> , <a href="#">XX@I8</a> | 00-407       |
| 31  | 913 Ring      |         | Tag open-ended cables: E16;E5; C10:L17. Across from L11; L6: H17: inside at L6, F12, H20. 00-406   |              |
| 32  | 913 Ring      | 40 hrs. | Install external pump-out lines to South and C14 sumps   | PE/Raphael   |
| 33  | 913 Fan Hses. |         | Paint or replace Fan Hse. Entry doors as required.   | PE/Painters  |
| 34  | 913 Ring      |         | Upgrade utility AC wiring (outlets and lighting)   | Electricians |
| 1   | Booster Ring  |         | Repair concrete floor ILR 406971, Wayne Hulse 4010   | PE           |
| 2   | 914           |         | Clean-out storm drain in front of building   | Grounds      |
| 3   | 914           |         | Remove trees/brush east and south sides of bldg.   | Grounds      |
| 4   | 914 Roof      |         | Remove leaves and clear drains   | Grounds      |
| 5   | 942 Ring      |         | Verify tag open ended cable across from D2/D3 half cell  | PS Group     |
| C 6 | 914           |         | Repair steam condensate leak in O.H. door trench   | Steam Shop   |

**C-A DEPARTMENT MAINTENANCE, REPAIR AND MODIFICATION PROGRAM**  
**JOBS SCHEDULING REQUEST**

**GROUP: Power Distribution – T. Nehring (ext. 5275, Pager 4246)**

| <b><u>JOB#</u></b> | <b><u>AREA<br/>WHERE<br/>WORK IS<br/>TO BE<br/>DONE</u></b> | <b><u>POSSIBLE<br/>DISRUPTIO<br/>NS TO<br/>OTHERS</u></b> | <b><u>TIME<br/>PERIOD</u></b> | <b><u>JOB DESCRIPTION, RESPONSIBLE<br/>PERSON &amp; GROUP DOING THE WORK</u></b> | <b><u>ADD'L.<br/>SUPPORT<br/>AND<br/>COMMENTS</u></b> | <b><u>HP<br/>SURVEY<br/>AND<br/>DETAILS</u></b> |
|--------------------|---|---|-------------------------------|--|---|---|
|--------------------|---|---|-------------------------------|--|---|---|

**AGS**

|   |              |  |                       |   |  |  |
|---|--------------|--|-----------------------|---|--|--|
| 1 | 912TE        |  | August                | Provide power to new water equipment                      |  |  |
| 2 | NEBA         |  | August                | Relocate transformers that interfere with passage to 912A |  |  |
| 3 | Target Bldg. |  | June 22 <sup>nd</sup> | Tie in last circuit to new C Substation                   |  |  |

**LINAC**

|   |                         |  |                       |  |  |  |
|---|-------------------------|--|-----------------------|--|--|--|
| 1 | Emergency Power for BAF |  | June 25 <sup>th</sup> | Tie in new power for BAF                     |  |  |
| 2 | UEB power for BAF       |  | June 25 <sup>th</sup> | Tie in new panelboard for BAF power supplies |  |  |
| 3 | Repair Starter          |  | July                  | Repair broken starter enclosure              |  |  |
| 4 | Adjust voltage          |  | July                  | Correct voltage tap on transformer           |  |  |
| 5 | Disconnect racks        |  | June 17 <sup>th</sup> | Disconnect racks for BAF project             |  |  |
| 6 | Power Panel             |  | August                | Label Panel                                  |  |  |

**RHIC**

|   |                           |            |             |  |                      |  |
|---|---------------------------|------------|-------------|--|----------------------|--|
| 1 | B-1004A                   | RF Testing | 7/29 – 8/9  | Install new power for RF group                   | Contract Labor       |  |
| 2 | Ring Areas                |            | 8/19 – 8/30 | Repair lighting contactors                       |                      |  |
| 3 | B-1005E                   |            | 6/12 – 8/16 | Electrical work for Helium Reliquifier           | BNL & Contract Labor |  |
| 4 | Service Bldgs.            |            | 8/19 – 8/30 | Install surge arrestors (1002, 1004, 1006, 1012) |                      |  |
| 5 | 1006 WAH                  |            | 4/1 – 5/1   | Revise lighting in WAH                           | Contract Labor       |  |
| 6 | 1004B                     |            | 7/8 – 7/26  | Install new isolation switches for MMPS          |                      |  |
| 7 | Cryo Tanks                |            | 6/17 – 6/28 | Install conduit for tank control valves          |                      |  |
| 8 | Alcoves 9A, 9C, and 1010A |            | 7/1 – 7/3   | Install receptacle for racks                     |                      |  |
| 9 | 1006B                     |            | July        | Install ups equipment and panels                 | Contract Labor       |  |

|    |       |           |  |                |
|----|-------|-----------|--|----------------|
| 10 | 1008B | June      | Install ups equipment and panels           | Contract Labor |
| 11 | 1006B | June      | Provide power to reliquifier refrigerator  |                |
| 12 | 1005H | June      | Maintain 4.16 kV equipment                 | Line Crew      |
| 13 | 1006A | September | Provide power to redundant water equipment |                |
| 14 | 1008C | September | Provide power to redundant water equipment |                |
| 15 | 1006  |           | Soft start for STAR MMPS                   |                |

**C-A DEPARTMENT MAINTENANCE, REPAIR AND MODIFICATION PROGRAM**  
**JOBS SCHEDULING REQUEST**

**GROUP: Pulsed Power – R. Zapasek (ext. 2189, Pager 4263), A. Zhang (ext. 5369, Pager 7248)**

| <b><u>JOB#</u></b> | <b><u>AREA<br/>WHERE<br/>WORK IS<br/>TO BE<br/>DONE</u></b> | <b><u>POSSIBLE<br/>DISRUPTIONS<br/>TO<br/>OTHERS</u></b> | <b><u>TIME<br/>PERIOD</u></b> | <b><u>JOB DESCRIPTION, RESPONSIBLE<br/>PERSON &amp; GROUP DOING THE WORK</u></b> | <b><u>ADD’L.<br/>SUPPORT<br/>AND<br/>COMMENTS</u></b> | <b><u>HP<br/>SURVEY<br/>AND<br/>DETAILS</u></b> |
|--------------------|---|--|-------------------------------|--|---|---|
| 1                  | AGS   |  | 80 hrs.                       | G10 Kicker, Maintenance  | Zhang   | HP  |
| 2                  | AGS   |  | 20 hrs.                       | A5 Kicker, Thyatron replacement,   | Zhang   | HP  |
| 3                  | AGS   |  | 40 hrs.                       | Tune Meter, Maintenance  | Zhang   | HP  |
| 4                  | AGS, H10  |  | 2 Mts                         | DC Bump, Installation  | Mi  |   |
| 5                  | AGS, 913S   |  | 16 hrs.                       | H10, Inspect connections<br>Lockey   |   | HP  |
| 6                  | AGS, L18A   |  | 16 hrs.                       | L20, Inspect connections   | Lockey  | HP  |
| 7                  | Booster   |  | 40 hrs.                       | F3 Kicker, Maintenance   | Zhang   | HP  |
| 8                  | 914   |  | 2 Mts                         | F2, 4, 7, A1, New IGBT Gate Ckts   | Lockey  |   |

**C-A DEPARTMENT MAINTENANCE, REPAIR AND MODIFICATION PROGRAM**  
**JOBS SCHEDULING REQUEST**

**GROUP: RF Group – N. Laloudakis (ext. 7177, Pager 4261), A. Zaltsman (ext. 2976, Pager 4259)**

| <b><u>JOB#</u></b> | <b><u>AREA<br/>WHERE<br/>WORK IS<br/>TO BE<br/>DONE</u></b> | <b><u>POSSIBLE<br/>DISRUPTIONS<br/>TO<br/>OTHERS</u></b> | <b><u>TIME<br/>PERIOD</u></b> | <b><u>JOB DESCRIPTION, RESPONSIBLE<br/>PERSON &amp; GROUP DOING THE WORK</u></b> | <b><u>ADD'L.<br/>SUPPORT<br/>AND<br/>COMMENTS</u></b> | <b><u>HP<br/>SURVEY<br/>AND<br/>DETAILS</u></b> |
|--------------------|---|--|-------------------------------|--|---|---|
|--------------------|---|--|-------------------------------|--|---|---|

**BOOSTER**

|   |                         |  |  |   |     |     |
|---|-------------------------|--|--|---|-----|-----|
| 1 | Building 942            |  |  | Replace or clean all air filters (PM)           | Yes | Yes |
| 2 | Building 942            |  |  | Replace or clean all water filters (PM)         | Yes | Yes |
| 3 | Building 914            |  |  | Install new Grid Power Supplies                 | No  | Yes |
| 4 | Building 914<br>and 942 |  |  | Install and terminate cables for new BPM system | Yes | Yes |

**AGS**

|   |              |  |  |  |     |     |
|---|--------------|--|--|--|-----|-----|
| 1 | Building 913 |  |  | Replace all gap short relays (10 Stations) | No  | Yes |
| 2 | Building 913 |  |  | Retube all feedback amps (10 Each)         | No  | Yes |
| 3 | Building 913 |  |  | Replace or clean all air filters (PM)      | Yes | Yes |
| 4 | Building 913 |  |  | Replace or clean all water filters (PM)    | Yes | Yes |
| 5 | Building 929 |  |  | ENI drivers New Control Box                | No  | Yes |

**C-A DEPARTMENT MAINTENANCE, REPAIR AND MODIFICATION PROGRAM**  
**JOBS SCHEDULING REQUEST**

**GROUP: Vacuum – Supervisor: Steve Gill, Ext 4627, Pager 4164 – Addtl. Contact: Mike Mapes, Ext. 2841, Pager 4277**

| <b><u>JOB#</u></b> | <b><u>AREA<br/>WHERE<br/>WORK IS<br/>TO BE<br/>DONE</u></b> | <b><u>POSSIBLE<br/>DISRUPTIONS<br/>TO<br/>OTHERS</u></b> | <b><u>TIME<br/>PERIOD</u></b> | <b><u>JOB DESCRIPTION, RESPONSIBLE<br/>PERSON &amp; GROUP DOING THE WORK</u></b> | <b><u>ADD'L.<br/>SUPPORT<br/>AND<br/>COMMENTS</u></b> | <b><u>HP<br/>SURVEY<br/>AND<br/>DETAILS</u></b> |
|--------------------|---|--|-------------------------------|--|---|---|
|--------------------|---|--|-------------------------------|--|---|---|

**LINAC**

|   |       |  |  |   |  |  |
|---|-------|--|--|---|--|--|
| 1 | LINAC |  |  | Move HEBT 3 TMP to collimator in HEBT 2         |  |  |
| 2 | LINAC |  |  | Inst. New sector valve and bellows @ collimator |  |  |
| 3 | LINAC |  |  | Inst. New rough valve on HEBT 2 & 3 TMP's       |  |  |
| 4 | LINAC |  |  | Possibly move BLIP 1 TMP to another location    |  |  |
| 5 | LINAC |  |  | Possibly install 8" cross w/laser U/S of BM2    |  |  |
| 6 | LINAC |  |  | Maintenance of BLIP and HEBT TMP's              |  |  |
| 7 | LINAC |  |  | Change out 4 HEBT 2 ion pumps                   |  |  |

**BOOSTER**

|   |         |  |  |  |  |  |
|---|---------|--|--|--|--|--|
| 1 | Booster |  |  | Gauge collector cables...attach connectors & install   |  |  |
| 2 | Booster |  |  | Install B6 dump/security valve/WCM                     |  |  |
| 3 | Booster |  |  | Remove D3 IPM, Dump Kicker, D4 half cell and D6 QC     |  |  |
| 4 | Booster |  |  | Install D3 Kicker/Thin Septum/IPM                      |  |  |
| 5 | Booster |  |  | Remove D6 Dump/Install D6 Lambertson and QC            |  |  |
| 6 | Booster |  |  | D7 Half cell: remove u/s Flange and install new flange |  |  |
| 7 | Booster |  |  | Test of Booster bakeout carts                          |  |  |
| 8 | Booster |  |  | Wire B3 RF cavities for insitu bake                    |  |  |
| 9 | Booster |  |  | Repair TSP power supplies and 930UEB bakeout remote PC |  |  |



|    |         |   |
|----|---------|---|
| 10 | Booster | Check IGs for voltage leakage, install remote RGA boxes |
| 11 | Booster | Prebake D3 & D6 septums, D4 HC, D6 QC and B6 dump       |
| 12 | Booster | Wire B6, D3, D4, D6 for insitu bake                     |
| 13 | Booster | Insitu bake of B & D sectors                            |
| 14 | Booster | Pull new cables for BAF sections                        |
| 15 | Booster | Terminate new IG, TCG, IP, GV, FV cables                |
| 16 | Booster | Upgrade vacuum control at 930 UEB                       |
| 17 | Booster | Install BAF Line at Booster side                        |

## BAF

|    |     |   |
|----|-----|---|
| 1  | BAF | Inventory and QC new BAF/Booster heating jackets          |
| 2  | BAF | Fabricate BAF bakeout cart                                |
| 3  | BAF | Weld and leak check magnet spool pipes in tunnel          |
| 4  | BAF | Install pipe and pump stands / tees, connect, pumpdown... |
| 5  | BAF | Run all BAF cables from #947 to tunnel                    |
| 6  | BAF | Wire for insitu bake                                      |
| 7  | BAF | Fabricate and test new dry pump TMP carts                 |
| 8  | BAF | Terminate and test CCG, TCG, IP, GV, FV cables            |
| 9  | BAF | Install PLC, GC, IPC                                      |
| 10 | BAF | Wire PLC I/O, make setpoint cables                        |
| 11 | BAF | System integration and test                               |

## AGS

|   |     |  |  |
|---|-----|--|--|
| 1 | AGS | Replace F-10 SEPTUM:<br>loto/vent/replace/pumpdown/lc  |  |
| 2 | AGS | Install new C-15 Polarimeter and 2 new sector valves   |  |
| 3 | AGS | Replace all 12 Sextupole magnets at the #13:<br>loto and vent entire AGS ring / remove and install all #13 sector valves | 4 seals per<br>sextupole... 48<br>required |
| 4 | AGS | Check all cold cathode and tc gauges and replace as required   |  |

as required

- |   |     |   |
|---|-----|---|
| 5 | AGS | Perform maintenance on all tmp's<br>(oil/grease/test)   |
| 6 | AGS | Install new A-10 TUNE METERS (???)  |
| 7 | AGS | Install covers on exposed Jones Strips in A-<br>10/E-18/H-10 houses (power must be off to do<br>this) |
| 8 | AGS | Repair IPPS as needed   |
| 9 | AGS | Bleed up C5 and E15 IPMs for repair of servo<br>valves  |

## **AtR**

- |   |     |   |
|---|-----|---|
| 1 | AtR | Inst. New air line filters for sector valves... U,<br>W, X, Y Lines |
| 2 | AtR | Replace all valve solenoids and test                                |
| 3 | AtR | Check CCG serial no for possible replacement                        |
| 4 | AtR | Leak check sections with high pressure                              |

**C-A DEPARTMENT MAINTENANCE, REPAIR AND MODIFICATION PROGRAM**  
**JOBS SCHEDULING REQUEST**

**GROUP: Water System – Supervisor: John deBoer, Ext 4668, Pager 4250 – Addtl. Contact:**  
**Larry Vogt, Ext. 4797, Pager 4273, R. Grandinetti, Ext. 7186, Pager 4139**

| <b><u>JOB#</u></b> | <b><u>AREA<br/>WHERE<br/>WORK IS TO<br/>BE DONE</u></b> | <b><u>POSSIBLE<br/>DISRUPTIONS<br/>TO<br/>OTHERS</u></b> | <b><u>TIME<br/>PERIOD</u></b> | <b><u>JOB DESCRIPTION, RESPONSIBLE<br/>PERSON &amp; GROUP DOING THE WORK</u></b> | <b><u>ADD'L.<br/>SUPPORT<br/>AND<br/>COMMENTS</u></b> | <b><u>HP<br/>SURVEY<br/>AND<br/>DETAILS</u></b> |
|--------------------|---|--|-------------------------------|--|---|---|
|--------------------|---|--|-------------------------------|--|---|---|

**BLDG. 913 AGS RING**

|   |          |                        |   |   |      |    |
|---|----------|------------------------|---|---|------|----|
| 1 | AGS Ring | Cooling<br>System Down | 6/2 to 9/2<br>Summer<br>Mnt 160<br>mhers. | Installation of 12 new sextapoles, draining and filling of magnets, removal of old hoses and fitting, installation of new manifold, fittings and hoses.     | None | HP |
| 2 | AGS Ring | Cooling<br>System Down | 6/2 to 9/2<br>Summer<br>Mnt 60<br>mhers.  | Installation of new F-10, draining and filling of magnet, removal of old hoses and fittings, Buss modifications and Installation of new hoses and fittings. | None | HP |
| 3 | AGS Ring | Cooling<br>System Down | 6/2 to 9/2<br>Summer<br>Mnt 36<br>mhers.  | Replace worn hoses and leaking fittings   | None | HP |
| 4 | AGS Ring | Cooling<br>System Down | 6/2 to 9/2<br>Summer<br>Mnt 8<br>mhers.   | Replace bag filters in 5 cartridges   | None | HP |
| 5 | AGS Ring | Cooling<br>System Down | 6/2 to 9/2<br>Summer<br>Mnt. 24<br>mhers. | Replace air filters on airlines   | None | HP |
| 6 | AGS Ring | Cooling<br>System Down | 6/2 to 9/2<br>Summer<br>Mnt 24<br>mhers.  | Clean all strainers on tune quad magnets (13).  | None | HP |
| 7 | AGS Ring | Cooling<br>System Down | 6/2 to 9/2<br>Summer<br>Mnt 8<br>mhers.   | Rebuild F-5 Jordan PVC Valve  | None | HP |
| 8 | AGS Ring | Cooling<br>System Down | 6/2 to 9/2<br>Summer<br>Mnt 8<br>mhers.   | Rebuild J-10 Dump PVC Valve   | None | HP |

**AGS BLDG. 928/929 RFMG**

|   |            |                        |                        |  |      |     |
|---|------------|------------------------|------------------------|--|------|-----|
| 1 | RFMG Tower | Cooling<br>System Down | 6/2 to 9/2<br>40 Mhrs. | Perform Maintenance on cooling tower including repair of overtop valve and change gearbox oil. | None | N/A |
|---|------------|------------------------|------------------------|--|------|-----|

|   |                |                     |                     |  |               |     |
|---|----------------|---------------------|---------------------|--|---------------|-----|
| 2 | RFMG Pump Room | Cooling System Down | 480 Mhrs.           | Cleaning of the following HTXR'S, RF Cavity, RF PWR, Rectifier, Choke, and RFMG Siemens Oil Cooler | None          | N/A |
| 3 | RFMG Pump Room | Cooling System Down | 6/2 to 9/2 40 Mhrs. | Calibration and cleaning of pneumatic controls   | None          | N/A |
| 4 | RFMG Pump Room | Cooling System Down | 6/2 to 9/2 16 Mhrs. | Installation of new Liquid Rheostat covers   | PWR Room      | N/A |
| 5 | RFMG Pump Room | Cooling System Down | 6/2 to 9/2 80 Mhrs. | Removal and Installation of new RFMG tower valves 6 Large new valves                               | P.E. Plumbers | N/A |

## H-10 HOUSE

|   |           |                      |                    |                       |      |     |
|---|-----------|----------------------|--------------------|-----------------------|------|-----|
| 1 | Pump Room | Cooling Systems Down | 6/2 to 9/2 2 Mhrs  | Change out bag filter | None | N/A |
| 2 | Pump Room | Cooling Systems Down | 6/2 to 9/2 2 Mhrs. | Back flush HTXR       | None | N/A |

NOTE: WATCH STANDING WILL APPROXIMATELY SPEND 4 HOURS A DAY TO CHECK ON OPERATING EQUIPMENT AND PROVIDE SERVICES FOR THE GROUP.

|   |                        |                      |                                 |  |               |     |
|---|------------------------|----------------------|---------------------------------|--|---------------|-----|
| 1 | AGS Multipole System   | Cooling System Down  | 6/2 to 9/2 Summer Mnt. 24 Mhrs. | Change out bag filter, repack temp Control valve, Maintenance on pumps (2)   | None          | N/A |
| 2 | AGS Pump Room Controls | Cooling Systems Down | 6/2 to 9/2 Summer Mnt 16 Mhrs.  | Maintenance of pneumatic Controls (Calibration and cleaning)   | None          | N/A |
| 3 | AGS Main Magnet        | Cooling System Down  | 6/2 to 9/2 Summer Mnt 68 Mhrs.  | Install air bleeders on DI cartridges, change out bag filters, maintenance on E-vap coolers – No. 5 clean nozzles, No. 7 frozen pump, No. 8 squirrel cage vibration Mnt on pumps (3), back flush Htxr. Install new PLC load and test | None          | N/A |
| 4 | AGS Domestic Water     | Cooling System Down  | 6/2 to 9/2 Summer Mnt. 4 Mhrs.  | Schedule and perform RPZ test by P.E. 911A pump room and 915 10" RPZ.  | P.E. Plumbers | N/A |
| 5 | AGS Chillers           | Chillers Down        | 6/2 to 9/2 Summer Mnt 120 mhrs. | Draining of cooling system, installation of PLC Controls, wiring, Transmitters, and testing.   | P.E. A/C      | N/A |

## BLDG 911A WESTINGHOUSE

|   |                                 |                     |                                 |  |               |     |
|---|---------------------------------|---------------------|---------------------------------|--|---------------|-----|
| 1 | AGS Westinghouse Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt. 20 Mhrs. | Final hook up of new Htxr, removal of old Htxr. Draining and filling of water and hydraulic fluid. | P.E. Plumbers | N/A |
| 2 | AGS Westinghouse Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt. 16 Mhrs. | Installation of new liquid rheostat temp control and probe.  | None          | N/A |
| 3 | AGS Westinghouse Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt. 24 Mhrs. | Maintenance on Cooling Pumps (2)   | None          | N/A |

## BLDG. 951 AGS RFPA

|   |                         |                     |                                 |   |               |     |
|---|-------------------------|---------------------|---------------------------------|---|---------------|-----|
| 1 | AGS RFPA Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt           | Draining and filling, installation of mod, new Htxr, pumps, controls, and test of system. | P.E. Plumbers | HP  |
| 2 | AGS RFPA Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt. 16 Mhrs. | Install air bleeders to Di cartridges and redo Di and make – up Piping hook-up            | None          | N/A |
| 3 | AGS RFPA Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt. 8 Mhrs.  | Maintenance, repair and cleaning of E-vap cooler  | None          | N/A |
| 4 | AGS RFPA Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt. 6 Mhrs.  | Schedule and perform RPZ test by P.E.   | None          | N/A |
| 5 | AGS RFPA Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt. 16 Mhrs. | Maintenance on pumps (2)  | None          | N/A |
| 6 | AGS RFPA Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt. 4 Mhrs.  | Replace Filters inline bag filter   | None          | N/A |

## BLDG 951 FAST PULSE QUAD

|   |                                    |                     |                                 |  |      |     |
|---|------------------------------------|---------------------|---------------------------------|--|------|-----|
| 1 | AGS Fast Pulse Quad Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt. 40 Mhrs. | Disassemble, reassemble and clean FPQ Htxr | None | N/A |
| 2 | AGS Fast Pulse Quad Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt. 4 Mhrs.  | Change out bag filter                      | None | N/A |
| 3 | AGS Fast Pulse Quad Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt. 8 Mhrs.  | Pump Maintenance                           | None | N/A |
| 4 | AGS Fast Pulse Quad Cooling System | Cooling System Down | 6/2 to 9/2 Summer Mnt. 8 Mhrs.  | Temp Controller Maintenance                | None | N/A |

## F-10 HOUSE BLDG 932

|   |                |                     |                     |  |      |     |
|---|----------------|---------------------|---------------------|--|------|-----|
| 1 | F-10 Tower     | Cooling System Down | 6/2 to 9/2 16 Mhrs. | Perform maintenance, repair and cleaning to F-10 Tower | None | N/A |
| 2 | F-10 Pump Room | Cooling System Down | 6/2 to 9/2 16 Mhrs. | Replace bag filters and perform MNT on all pumps       | None | HP  |

## BOOSTER - BLDG 914 and 942

|   |              |                     |                        |   |              |    |
|---|--------------|---------------------|------------------------|---|--------------|----|
| 1 | Booster Ring | Cooling System Down | 6/2 to 9/2 Summer Mnt. | Drain and fill MM system for D-6 Septum, remove/install cooling lines for D-3, D-4.<br>Drill holes and weld on return piping. | P.E. Welders | HP |
|---|--------------|---------------------|------------------------|---|--------------|----|

|   |                   |                     |  |  |               |    |
|---|-------------------|---------------------|--|--|---------------|----|
| 2 | Booster Pump Room | Cooling System Down | 6/2 to 9/2 Summer Mnt. See Hock's Schedule | Installation of high pressure cooling system, controls and testing for D-6 in BSTR Pump Room, includes Mod to MM DI System | P.E. Welders  | HP |
| 3 | Booster Ring      | Cooling System Down | 6/2 to 9/2 Summer Mnt.                     | Removal relocation and installation of the B-6 Beam dump   | P.E. Plumbers | HP |
| 4 | Booster Pump Room | Cooling System Down | 6/2 to 9/2 Summer Mnt. 8 Mhrs.             | Change bag filters on MM bag filter  | None          | HP |
| 5 | Booster Ring      | Cooling System Down | 6/2 to 9/2 Summer Mnt. 16 Mhrs.            | Clean all RF Strainers on RF PA'S  | RF Group      | HP |
| 6 | Booster Ring      | Cooling System Down | 6/2 to 9/2 Summer Mnt. 8 Mhrs.             | Change out ring air filters  | None          | HP |
| 7 | Booster Pump Room | Cooling System Down | 6/2 to 9/2 Summer Mnt. 32 Mhrs.            | Perform MNT on all pumps   | None          | HP |
| 8 | Booster Ring      | Cooling System Down | 6/2 to 9/2 Summer Mnt. 4 Mhrs.             | Remove DH-5 Measure flows and sureflow switches  | None          | HP |

## BLDG 911, 912, and 912A - Experimental Towers 1,2,3,4, C-Line and SEM

|   |                 |                      |                                 |  |      |                                      |
|---|-----------------|----------------------|---------------------------------|--|------|--------------------------------------|
| 1 | EXP Towers      | Cooling Systems Down | 6/2 to 9/2 Summer Mnt 40 Mhrs.  | Drain and clean all towers and strainers       | None | N/A                                  |
| 2 | EXP Towers      | Cooling Systems Down | 6/2 to 9/2 Summer Mnt. 40 Mhrs. | Perform maintenance on pumps and controls      | None | HP Coverage on C-Line and SEM System |
| 3 | Tower No. 1     | Cooling Systems Down | 6/2 to 9/2 Summer Mnt. 16 Mhrs. | Replace Make up Tank                           | None | N/A                                  |
| 4 | Towers 1, 2 & 4 | Cooling Systems Down | 6/2 to 9/2 Summer Mnt. 48 Mhrs. | Replace Tower Gear Box oil                     | None | N/A                                  |
| 5 | EXP Towers      | Cooling Systems Down | 6/2 to 9/2 Summer Mnt.          | P.E. Plumbers test all RPZ (back flow prevent) | None | N/A                                  |

## BLDG 919A Tower 5

|   |             |                      |            |   |      |     |
|---|-------------|----------------------|------------|---|------|-----|
| 1 | Tower No. 5 | Cooling Systems Down | 6/2 to 9/2 | Drain and clean cooling tower and strainers | None | N/A |
| 2 | Tower No. 5 | Cooling Systems Down | 6/2 to 9/2 | Change out tower gear box oil               | None | N/A |
| 3 | Tower No. 5 | Cooling Systems Down | 6/2 to 9/2 | Pump MNT                                    | None | N/A |

## AGS BEAM STOP BLDG 946

|   |           |                        |                        |   |      |    |
|---|-----------|------------------------|------------------------|---|------|----|
| 1 | Beam Stop | Cooling<br>System Down | 6/2 to 9/2<br>24 Mhrs. | Reconfigure piping for the beam stop deionizer.<br>Install bleeder valves | None | HP |
|---|-----------|------------------------|------------------------|---|------|----|

## BLDG 930 LINAC

|    |                       |                        |                        |   |                                  |     |
|----|-----------------------|------------------------|------------------------|---|----------------------------------|-----|
| 1  | LINAC Tower           | Cooling<br>System Down | 6/2 to 9/2<br>16 Mhrs. | Perform tower maintenance, cleaning and repairs   | None                             | N/A |
| 2  | LINAC 930A            | Cooling<br>System Down | 6/2 to 9/2<br>16 Mhrs. | BAF mod to the Booster Power Supply Area,<br>draining and filling of LINAC RF and transport<br>water. Disconnecting and reconnecting of<br>Power Supplies, Testing of System. | Contractors                      | HP  |
| 3  | LINAC UEB<br>Area     | Cooling<br>System Down | 6/2 to 9/2<br>16 Mhrs. | Installation of cooling lines for new Power<br>Supplies and some piping modifications.<br>Testing of cooling lines  | Contractors and<br>P.E. Plumbers | HP  |
| 4  | LINAC Cavity          | Cooling<br>System Down | 6/2 to 9/2<br>60 Mhrs. | Upgrade on cavity station, new bag filter and<br>controllers including some piping modifications  | P.E. Plumbers                    | N/A |
| 5  | LINAC Pump<br>Room    | Cooling<br>System Down | 6/2 to 9/2<br>60 Mhrs. | LINAC RF and Transport Htxr cleaning  | None                             | N/A |
| 6  | LINAC 930A            | Cooling<br>System Down | 6/2 to 9/2<br>80 Mhrs. | Replace old/worn hoses on the rectifiers Power<br>supplies  | Power Rm<br>Group                | N/A |
| 7  | LINAC HEBET<br>Line   | Cooling<br>System Down | 6/2 to 9/2<br>24 Mhrs. | Remove discontinued sure flows and measure<br>flows on DH2 thru 4. Install common flow<br>switches.   | Power Rm<br>Group                | N/A |
| 8  | LINAC Control<br>Room | Cooling<br>System Down | 6/2 to 9/2<br>25 Mhrs. | Calibrate, repair and clean pneumatic controls  | None                             | N/A |
| 9  | LINAC                 | Cooling<br>System Down | 6/2 to 9/2<br>80 Mhrs. | Drain, replace and repair LINAC domestic water<br>lines.  | P.E. Plumbers                    | N/A |
| 10 | LINAC Pump<br>Room    | Cooling<br>System Down | 6/2 to 9/2<br>16 Mhrs. | Perform maintenance on all pumps  | None                             | N/A |